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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/574,119

03/30/2006

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SERVIER 493 PCT

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08/07/2009

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EXAMINER

OH, TAYLOR V

ART UNIT

PAPER NUMBER

1625

MAIL DATE

DELIVERY MODE

08/07/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

It is noted that applicants have filed an Amendment after the Final Rejection on 6/29/09; applicants' attorney has addressed the issues of record. The proposed argument in the amendment will be entered; however, it is not in a condition for allowance.

### **The Status of Claims**

Claims 12-24 are pending.

Claims 12-24 are rejected.

### **Claim Rejections - 35 USC § 112**

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The rejection of Claim 23 under 35 U.S.C. 112, first paragraph, has been withdrawn due to the modification of the claims in the amendment.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**The rejection of Claims 12-24 under 35 U.S.C. 103(a) as being unpatentable over Ogletree et al (US 2003/0109543) in view of Lavielle et al (US 5,472,979).**

The rejection of Claims 12-24 under 35 U.S.C. 103(a) as being unpatentable over Ogletree et al (US 2003/0109543) in view of Lavielle et al (US 5,472,979) has been maintained with reasons of record filed on 8/22/08.

**Applicants' Argument**

2. Applicants argue the following issues:
  - a. Lavielle et al does not teach that BAYu3405 lacks efficacy in terms of inhibiting platelet aggregation; one skilled in the art would not have expected a combination of clopidogrel and compound(A) to exhibit synergistic effects based on this disclosure since the prior art teaches that the compounds of formula (I) exhibit platelet aggregation activity equal to or greater than the BAYu3405.
  - b. According the Dr. Laurence's Declaration, there was an important synergy for clopidogrel and compound (A) ,whereas there was not much synergy observed for clopidogrel and BAYu3405, which was replaced for ifetroban due to its unavailability in the commercial market and a difficulty in

synthesizing the compound; therefore, the superior and unexpected effects associated with the claimed invention are not taught by the Ogletree et al (US 2003/0109543) in view of Lavielle et al.

First, regarding applicant's arguments, the Examiner has noted applicants' argument. However, Lavielle et al expressly teaches away from using BAYu3405 as a potential candidate for the best inhibiting platelet aggregating agent in reviewing the following passages as shown below(see col. 10, lines 43-54):

The compounds of formula (I) possess advantageous pharmacological properties. In particular, they are capable of inhibiting platelet aggregation induced by U46619 (9,11-dideoxy-11 $\alpha$ ,9 $\alpha$ -epoxymethanoprostaglandin F<sub>2</sub> $\alpha$ ), a TXA<sub>2</sub> receptor agonist, of inhibiting contractions brought about by U46619 on guinea pig trachea and of preventing in vivo bronchoconstrictions induced by U46619 in guinea pigs. In addition, the compounds inhibit the synthesis of TXA<sub>2</sub> in the blood of rabbits. The compounds of the invention possess markedly more intense pharmacological activities than those of a reference compound, BAY U3405 (Drug of the Future, 16(8), 701–705, 1991 ).

From this, unlike applicant's argument, it is quite clear that the compounds of formula (I) possess advantageous pharmacological properties; thus, they do **“possess markedly more pharmacological properties than those of BAY U3405”**, but **not equal to those of BAY U3405**. Therefore, the skilled artisan in the art would not have been contemplated for combining clopidogrel with BAYu3405 for testing out their

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synergy. On the other hand, Ogletree et al expressly describes a composition based on an ADP-receptor inhibitor, such as clopidogrel and a thromboxane A2 antagonist, useful for the treatment of cardiovascular diseases. Similarly, Lavielle et al does teach

the application of **3-{6-[(4-Chlorophenylsulfonyl)amino]-2-methyl-5,6,7,8-tetrahydronaphth-1-yl} propionic acid, sodium salt** having markedly more intense pharmacological activities than BAYu3405, a thromboxane A2 antagonist as an antithrombotic to cardiovascular diseases.

Therefore, it would have been obvious to the skilled artisan in the art to be motivated to incorporate the Lavielle et al's compound of thromboxane A2 antagonist as an alternative to BAYu3405 into the Ogletree et al composition. This is because both prior art disclose the composition for the same utility of the treatment of cardiovascular diseases and the skilled artisan in the art would expect such a combination to be feasible and successful as guidance (see col. 10, lines 43-54) shown in the prior art. Therefore, unlike applicants' argument, the combined prior art are still relevant to the claimed invention. Thus, applicants' argument are not persuasive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taylor Victor Oh whose telephone number is 571-272-0689. The examiner can normally be reached on 8:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet Andres can be reached on 571-272-0867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Taylor Victor Oh/  
Primary Examiner, Art Unit 1625  
8/03/09